# THE MARINE RECORD.

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## AROUND THE LAKES.

### CLEVELAND.

The Board of Trade at its last regular meeting appointed Geo. W. Gardner, R. T. Lyon and Captain W. B. Giles a committee to confer with Engineer Overman relative to extending the breakwater eastward of the river.

Late charters were the schooner Ellen Spry, ore from Escanaba to Lake Erie ports, 90c; schooner Reed Case, coal from Ashtabula to Chicago, 80c, and schooner G. W. Wesley, coal from Cleveland to Bay City, p. t.

The following telegram from Washington tells of the final disposition of the tax bill: "The Senate has passed the bill abolishing the fee for the reporting of vessels, and reducing that for clearing to 10 cents. This bill was passed by the House some time ago, and now awaits the President's signature to to become law."

At the Globe drydock since our last report the M. R. Warner received some new plank in her bottom and had her buts calked and some general repairs. The tug American Eagle had her bottom overhauled and calked. The Chauncy Hurlburt came down from Ashtabula recently, arriving here abont six o'clock, making the run nine miles per hour, to go into drydock to have her stern bearings fixed and bottom calked.

The schooner Cataract, Captain W. Barrett which went ashore at Wheatly on the 14th ult, arrived at this port on Monday in tow of the tug Bob Hackett, which released her with the assistant of jackscrews, etc. The Cataract is not damaged much but will go on Smith's boxes, where she will be examined and probably receive a through calking. The Cataract is classed B1 and valued at $5,000, her owners being Messrs. Samuel Shepherd, H. Arhle, and the Captain Barrett above mentioned, all of whom are of Port Stanley. She has carried coal between the latter port and Cleveland for several years.

R. L. Polk & Co., of Detroit, have at last got their Directory of the lakes afloat. It made its appearance in this city yesterday and is quite all that was claimed for it. We have heretofore given very extended notices of it. In addition to a complete list of vessel on the lakes, it contains a notice of every port and their connecting rivers; a classified directory of interests connected with lake navigation; the location of lighthouses; international code of signals; lifesaving districts; synopsis of marine law; tonnage rates on the Detroit and St. Clair rivers; table of distances, etc. The Directory will be for sale by ship chandlers at $5.

### DULUTH.

*Special to the Marine Record.*

J. J. Hibbard's new sidewheel ferry will be completed in a short time and will be put on the route between this city and Superior.

The tug Tom Dowling left for Amnicon on the 7th for a raft of logs for the Duluth Lumber Co.

The Grace Grummond is laid up for repairs to a broken crank pin. Captain E. Napier has resigned the command of the steamer and her owner, Mr. O'Conner, is here looking after her management. She will continue to run on the Two Harbors route.

Captain Thomas Wilson, of Cleveland, is at this port on business.

The Ocean will depart from this port regularly every Thursday at 6 p. m. B.

### CHICAGO.

*Special to the Marine Record.*

Rosel Downer, submarine diver, succeeded on the 3d of July in cutting a plank out of the steambarge Inter Ocean's wheel.

J. P. Devlin and George E. Earlie have formed a partnership under the firm name of Devlin & Co. They will do a general marine brokerage business and negotiate charters for grain, ore, lumber and merchandise of every description. Their office is at 156 Washington street, where subscribers of the MARINE RECORD, will find the papers heretofore addressed in care of the Chicago Custom house.

As the tug Wm. L. Ewing was towing the schooner Australia to this port on Monday, the big flue of her boiler burst. Fortunately no one was injured.

Sales on the lumber marker have been very dull and charters not at all easy to obtain.

Vesselmen at this port are anxious to know the result of the run down to Buffalo of the steamships H. J. Jewett and Philadelphia, and opinions are about evenly divided.

The tug Protection, wrecked last fall off Saugatuck, has been rebuilt and will commence running this week.

Rush street bridge is drawing toward completion and will shortly be swinging again.

At the Chicago Drydock Co.'s dock the schooner John Kelderhouse went in Monday to have her bottom calked; the schooner Jessie L. Boyce got her bottom calked and painted; the schooner Christine Nilsson got a new topmast; the schooner Ellen Spry a new cathead and crosstrees; the schooner Bertha Barnes a new foremast; the steamers City of Duluth and Peerless, some repairs. The steamer Armenia was in drydock on the 4th and got a new key to her wheel and her butts calked.

The steamer Lora, of the Graham & Morton line, having had considerable repairs and additions to her machinery, done at Grand Haven by H. Bloecker & Co., commenced running on the 5th between Chicago and Berton Harbor. The steamer City of St. Joseph, of the same line, runs between Chicago and St. Joseph. Both steamers make daily trips and the fare for the round trip, including berth, is only $1.

At Miller Brothers' drydock the schooner Lady Dufferin is getting some new plank in her bottom, new rail all around, some new stringers and stanchions and a thorough overhauling. The sand boat Imperial is having the iron taken off her sides and bottom to find where she was leaking. The leak will be stopped and her houses fixed up.

The schooner Sam Flint got a new piece of keel and new deck frames and deck; the schooner George L. Wren got a leak stopped and her rudder fixed; the schooner Orkney Lass had a leak stopped.

There was a fair demand for vessel room yesterday, which was surprising considering the small quantity of grain stored in the elevators here. There were practically no local rates of freight though, as vessel agents found it more profitable to accept through rates to Montreal and New York. The nominal rate to Buffalo was 2 cents for wheat and 1¾ cents for corn. The rate to Kingston was 3¾ cents for wheat and 3½ cents for corn, shippers paying the canal tolls. Iron ore freights were also dull. The schooner Michigan was sent to Escanaba on the chance of getting a cargo, but it is not known that any charter was made for her. The rate was nominally 95c per ton to Lake Erie ports.

The steambarge H. J. Jewett made the run from Milwaukee to Chicago in 5 hours and 37 minutes, which is an average speed of fourteen miles an hour. It is the fastest time ever made between this city and Milwaukee, and deserves special mention. The Jewett was loaded with 1,000 tons of merchandise, and she left 700 tons in Milwaukee. Last fall the schooner David Vance and Moonlight made the run with a fresh northwesterly gale in 5 hours and 24 minutes. Both vessels were light.—*Inter Ocean.*

The tug Thomas Spears has suffered another aggravating delay by something giving out in her boiler. She arrived here Friday and has been here ever since repairing the dome of her boiler.

An examination of the schooner John Kelderhouse's bottom has developed the fact that she will not need more than a general recalking. The sharp rocks of Hog Island reef did not do the amount of damage anticipated, and the planks of her bottom are not hurt at all. She will be out of dock in a few days, and will be ready to load grain.

The big ark A. R. Kellogg struck the center pin of the Twenty-second street bridge while being towed up the river early Sunday morning, and did some damage to herself and the bridge. Several spring piles were broken and a hole knocked in the Kellogg's bow. She will be repaired in Ludington. The accident does not effect the swinging of the bridge at all, and will not be a costly one in the matter of repairs.

The members of the Chicago yacht club are actively engaged in making preparations for their tenth annual regatta, which takes place next Saturday. In addition to the local yachts, it is expected that quite a number of yachts from other cities will participate in the regatta. Invitations will be issued to about 400 friends of the club. A steamer will leave the Goodrich dock at 11:45 a. m. with invited guests. The steamer Welcome will convey the judges, regatta committee and members of the press, leaving the breakwater at the foot of Van Buren street at the same hour. The course for schooners, sloops and cutters of the first, second and third classes will be a triangular one of eighteen nautical miles. The yachts will start at the opening off Van Buren street, sail over a southeast course of six miles around a buoy with white flag and red stripe, thence north six miles around a buoy with white flag and two stripes and return over a southwest course to place of starting. Yachts of the fourth class will sail the same course as far as the first stake, and return to the opening. The starting line, from which time will be taken, will be an imaginary line drawn from the red beacon light on the south end of the north pier to a point on the north end of the south pier, thence around the flag stakes. T. W.

### TRENTON.

The Escanaba & Lake Michigan Transportation Company's new steambarge Rhoda Emily was launched a few days ago at John Craig's shipyard at Trenton, and was towed to Detroit by the tug Cushing. Her dimensions are as follows: Length of keel, 165 feet; over all, 180 feet; beam, 32 feet; depth of hold, 13 feet. She is single decked and iron strapped, and built in the most substantial manner. Her engine will be built by the Riverside iron works and her boiler by the McGregor boiler works.

### DETROIT.

*Special to the Marine Record.*

July 8—Marine intelligence in this immediate locality is decidedly at a discount, and there is nothing of special moment to interest the readers of the RECORD.

During the latter part of the week a strong wind sprung up from the southwest which did not extend beyond a whole sail breeze, and not sufficient to deter a well fitted vessel from working to windward on any of the lakes, yet, strange to say, there were not a few who chose to show the white feather and hunt a lea. On Sunday it had veered to northwest, and was of about the same force as the day previous, but it is gradually wearing away.

The schooner Cataract, which has been ashore the past three weeks below Rond Eau, was released on Sunday afternoon, at 3 o'clock, by the tugs Admiral Porter, Bob Hackett and Kittie Haight, and was taken by the Hackett to Cleveland for repairs. This is the tenth vessel the Hackett has aided in getting off this season.

To-day (Monday) there are but two vessels at this port, both discharging ore and cedar posts respectively, but nothing for shipment save one cargo of staves.

Lumber and ore cargoes continue passing this port in considerable quantities, but not as freely as the week previous.

The few craft that were laid up at Bay City are again on the move, with possibly one or two exceptions.

The tug Crusader, while coming up the river the latter part of the week with a tow of vessels, broke her shaft and lost her wheel, near the Lime Kiln crossing. The tug Sweepstakes went to the rescue and brought the disabled steamer and her tow to this port. She has since completed her repairs and proceeded on with her vessels to Lake Michigan.

The steam yacht Winnifred, of Cleveland, arrived here on Saturday morning with an excursion party on board, took on a supply of coal and again took her departure.

The new steambarge Sir Leonard Tilley, built by Shickaluna last winter at St. Catharines, passed up on Saturday, making a brief call at Windsor. She is of the medium size, and is decidedly the best specimen of that class of Canadian vessels, both in model and get up, that has ever passed this way. She was laden with steel rails destined for Port Arthur, Lake Superior.

Wrecking business has somewhat subsided hereabout, and tugs chiefly engaged in that occupation are turning their attention to rafting.

The tug Champion, of Grummond's line, has been quite successful in releasing vessels this season, her last achievement being the rescue of the J. Kelderhouse from the Whale's Back, in Green Bay, and taking her to Chicago.

The tug International, nee W. H. Pringle, which has on board new wrecking arrangements, has been dispatched to Peninsula Harbor, Lake Superior, to release the propeller Georgian, which has been in bad shape there for some days past. This accomplished, she will make an effort to raise the steambarge J. C. Seaverns, sunk there early in the season.

The machinery for the new steambarge building at Bay City was shipped from here on Saturday.

[*Continued on 4th page.*]

## MARINE LAW.

BAD TOWAGE—DAMAGE THROUGH CARELESSNESS—A DECISION IN FAVOR OF THE NORWEGIAN BARK SIGRID.

*United States District Court, Philadelphia.*

The libel of Captain Josef Hannevig, master of the Norwegian bark Sigrid, against the owners of the steam tug Argus, of Philadelphia, was sustained by Judge Butler in the United States district court of that city, on June 18th, and the judge appointed Henry G. Ward, Esq., as commissioner, who will take testimony to ascertain the amount of pecuniary damages the bark has sustained.

The claim which the bark made against the Argus foots up $3,300, but the exact amount which the owners of the tug will be finally called upon to pay is a matter which can only be stated when Mr. Ward makes his report.

The complaint of the sailing vessel, as set forth by her counsel, Charles Gibbons, Jr., Esq , was as follows:

The Sigrid arrived at the capes of the Delaware on the 9th of March, 1883, with a cargo of sugar from Matanzas for Philadelphia. She came to anchor in the bay and the next day engaged the Argus to tow her to Philadelphia and dock her at her wharf for $80. At 2 o'clock on the morning of the 11th the tug came alongside of the bark and took the bark's hawser to assist her in weighing anchor. The tug so negligently and carelessly performed this part of her services that she fouled the hawser, a new one, around the anchors of the bark and cut it in many places. In addition, she brought a strain with the hawser across the headgear of the bark before the anchor was broken out of the ground, and the bobstay and lack-rope were carried away. After the anchors were aweigh the tug proceeded up the river with the bark in tow. When she arrived off the coal wharves at Greenwich Point she tried to dock the boat at Moro Phillip's wharf, but failed. At this time the tug was made fast to the starboard side of the bark. The tug went ahead again, missed the berth again, and backed out into the river. This was repeated three times without success, and finally, Captain David Hallenger, of the tug, who was superintending the docking of the bark, ordered the tug astern once more, which was done with such speed that, before the tug reversed her engines to again go ahead, she had towed the bark hard aground on the bar of Windmill Island, notwithstanding the warning of the pilot as to the danger in which he was placing the bark. After the bark grounded the tide and wind swung her head down the river, and she lay broadside on the bar during two low tides. These tides fell very low, the bark was high out of the water, and her weight caused the breaking of her knees and timbers. The bark was obliged to go upon the drydock for repairs; her copper was stripped off and it was found that she had sustained very serious damages, which cost $2,700, beside the loss of eleven days. The owners of the tug were notified of the accident but paid no attention to it. The bark was a stranger in Philadelphia, but Philadelphia was the home port of the tug. The tug is liable for these expenses. When a tug engages to tow a vessel into port she is bound to exercise reasonable skill and care in everything relating to the work, and this the Argus did not do. And she is also bound to know the channel of her home port, and whether, in the state of wind and water, it is safe to attempt to enter with the tow.

Henry R. Edmunds, Esq., for the tug: Upon the arrival of the bark at Moro Phillip's wharf the wind was blowing strong from the northwest and the tide running strong ebb; the tug was on the starboard side of the bark, which furnished the towline. These lines were made fast on the tug by those in charge of the tug, and on the bark by those in charge of the bark, under the supervision of the pilot. The man at the bark's wheel put his helm the wrong way and the first attempt was not successful. When the second attempt was made it was found the lines furnished by the bark were inadequate, considering the wind, weather, and size of the vessel, and were so improperly made fast by her officers and crew that they "rendered" around the bits or chocks, and before the bark got out other lines, or made those already out secure, the wind had driven and the tide drifted the bark on the shoal on the lower end of Windmill Island. No attempt was made by those in charge of the bark to prevent her getting aground, by casting anchor, or otherwise. The burden of proof is upon the bark to satisfy the court that the grounding would not have occurred but for the negligence of the tug. It was the duty of the bark to have sufficient and adequate lines immediately available for the service and properly made fast to the bark. Failing in such precautions the bark can not recover, and beside this, she ought to have dropped anchor. The docking was under the control of the pilot, who was the servant of the bark, and his negligence was her negligence.

Judge Butler, in deciding in favor of the bark, said:

"It is difficult to reach a satisfactory conclusion in this case. The testimony is irreconciliable throughout. On every material point the witnesses are at variance. Under such circumstances it is especially necessary to observe where the burden of proof rests.

"It was the respondent's duty to know his capability for the service and to ascertain in advance the sufficiency of his lines and attachments. To attempt docking the bark without this was negligence. The fact that the lines were furnished by the bark does not relieve him of his duty, or any part of it. He best understood the necessities of the occasion, and the responsibility of passing judgment on all the necessary appliances for the work he undertook was upon him. If the sufficiency of lines was open to doubt he should have demanded others. He could not take risks or try experiments.

"Whether, therefore, an inference of negligence or incompetency does, or does not, arise from the fact that the respondent failed to dock the bark and grounded her outside, this fact taken in connection with the evidence of the several awkward approaches to the dock, and the final retreat to, or near, shoal water, should certainly be held to support such an inference. The burden of exculpating himself must therefore be regarded as upon the respondent.

"I do not purpose to discuss the evidence. It is sufficient to say that I do not find anything in the state of the weather or tide, the condition of the lines, nor in any other matter of excuse set up, to repel this inference of negligence. The weather did not materially change after the respondent undertook this service, and it was his duty to calculate in advance its influence as well as the tide. I do not believe, however, that either the weather or the tide presented a serious obstacle. Nor am I satisfied that the hawser was insufficient, or that it "rendered" upon the bark. If it was insufficient, however, I repeat, the respondent should have seen to this in time to avoid danger. To the allegation that it 'rendered' the same answer is pertinent. Surely he should have discovered this before making the second attempt—if the rendering was material. No allusion to this excuse is found in the answer. The respondent was on board the bark and in virtual command there, as well as on the tug, at the time, and must be held responsible accordingly. He best understood the difficulties and demands of the occasion, and should have been vigilant in providing for them. After his failure, if the bark's anchor should not have been dropped, he should have commanded, or at least, have suggested it. The master of the bark was a stranger in the river and had a right to depend upon the tug. I do not find anything to justify a belief that the bark's wheel was turned the wrong way. The suggestion is extremely improbable. Such a mistake would be extraordinary. With an observance of the care required on such an occasion I think the bark would have been docked on the first effort and the grounding avoided. For the damage which resulted from the grounding the respondent must be held accountable. The claim presented may be highly exaggerated, as is not unusual in such cases. This, however, is a subject for further inquiry.

"The claim for chafing the hawser down the river I am not satisfied to allow. That the tug performed the extraordinary manoeuvers ascribed to her, there, and thus caused the injury, I cannot believe. The bark was mistaken in the extent of anchor chain out, and misled the tug regarding it. The tug was ordered forward and, in consequence of the mistake, halted and delayed. The wind and tide forced her back, whereby the line was allowed to sink and float under the bark. For the injury thus caused the tug is not responsible. Notwithstanding the mistake and consequent necessity for hauling and delaying the tug, the injury might have been avoided by taking the line in on the bark as it slackened, and that should have been done."

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### ACTION FOR DEMURRAGE.

An interesting action for demurrage, which is of especial interest to Chicago readers in view of the many suits of the same nature which are threatened to be brought in the courts there, has been decided recently in the United States Court in Milwaukee. The owners of the vessels which were delayed were awarded their full claims. The following is a synopsis of Judge Byer's decision:

"Henry A. Hawgood and Waldo A. Avery 1,310 tons of coal lately ladened on board sundry coal barges. A. Pugh, claimant.

This day came the parties by their proctors, and on consideration of the pleadings and proofs in this cause, and the arguments of counsel thereon, it is ordered, adjudged, and decreed by the Court that the demand of the libelants, as set forth in their libel against the 1,310 tons of coal therein mentioned, is founded on a cause of demurrage, civil and maritime, and is valid against said coal, and that the amount justly due the said libelants on account of such demurage is the sum of $1,339 and $167.50 interest thereon from the 6th day of September, A. D. 1882, the date of filing the libel in this cause, to this date, amounting in all to the sum of $1,506,40.

And it is further ordered, adjudged, and decreed that the libelants do have and recover of A. Pugh, claimant of said coal, and George A. Hatfield, E. R. Paine, Horatio Pratt, James O. Parker, and A. A. Albright, his sureties, the said sum of $1,506.40 together with their costs about their said suit in this behalf expended, taxed at $260.-10, and that the said libelants have execution therefor."

The vessel in question was the steambarge Belle Cross, and her consorts Chicago board of Trade, Little Jake and S. Clement.

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## AFLOAT AT LAST.

The following account of the raising of the Oneida from "On the St. Lawrence," issue of July 1st, will be read with interest:

After months of patient, hard labor, disappointments, and unsparing censure, Messrs. Backer & Youngs have triumphed and the propeller Oneida again floats. Early last Friday morning the tug Curlew and steam yacht Haselton took their places beside the sunken boat. Connection of steam pipes were made and the pumps started. The huge volumes of water, as they left the hold so long held captive by them, left a vacuum which could only be filled by buoyant air. The work of calking had been successfully done. Slowly, as if raising from a long slumber, the old boat began to shake off the lethargy that bound her, and rise from her bed in the river. News of the good fortune attending this last attempt was quickly spread and the people began to gather. Nearly a hundred skiffs, loaded with people, clustered about the scene of operation, while large numbers gathered on the shore. At 3 o'clock she floated, and a moment later Mr. Backer boarded the Haselton and started for Fisher's Landing to telegraph to Dimick & Bro. that their hopes had been realized and the Oneida had been saved. The Oneida now lies on the opposite side of the channel in a quiet bay, the same in which the propeller Ackron was burned. As soon as some repairs are made she will be brought to this port and afterward taken to Buffalo for repairs. We doubt not that she will pass and repass the scene of her disaster many times before the close of the season of 1884. A full measure of credit is due to Messrs. Backer & Youngs for their great work. It needs but a glance at the battening down in the engine room to convince the most careless observer that a work of no ordinary nature has been done under the most untoward circumstances. Your reporter picked his way through the thick slime to this spot, and after looking at the work done under thirty feet of water as cold as a December or January of last winter could make it, the joints closely fitted and the canvas drawn without a wrinkle in darkness dense as midnight, he came to the conclusion that Dimick & Bro, of Buffalo chose wisely when they committed this work to the hands of Messrs. Backer & Youngs. The pumps used were powerful machines from the foundry of Heald, Sisco & Co., Baldwinsville, N. Y. A glance sufficed to show that they were all that could be claimed for them.

## FACTS FROM DULUTH.

THE HULL OF THE WINNIPEG—GRAIN PROSPECTS—WORK OF THE CHAMBER OF COMMERCE—A VOTE OF THANKS.

*Special Correspondence of the Marine Record.*

DULUTH, July 3.

It is now stated positively, though for the twentieth time, that the hull of the ill fated Winnipeg, is to be raised this summer. Mr. Harvey is here expecting to recover the remains of his brother who died in her. Mr. Harvey's theory, that the remains of many more bodies than is now generally believed will be found in her when raised, is rather wild. The writer was at the fire from the first and it can be stated positively that only the three who were caught accidentally, one below, and the others who were overtaken in sleep, suffered death on her. All the passengers were aroused in time.

There has been shipped to Buffalo from here only 150,327 bushels of wheat during the past week, at 3 cents. The old crop is pretty well used up and there will be but little more activity in the grain trade until the fall crop comes in, which, from the present outlook, promises to be abundant.

There is nearly if not quite as much Minneapolis flour coming to Duluth as formerly in spite of the Transit Line entanglement. It is mostly consigned to the Grand Trunk via. Beatty's steamers to Sarnia.

The Chamber of Commerce met last Friday and heard the report of the special committee on Duluth harbor improvements (a copy of which is herewith mailed) According to this report, which was accepted and adopted, and a copy of which will be forwarded to the chief of engineers at Washington, there is certainly "something rotten in Denmark" in our harbor business, not only as to the original recommendations by the engineer in charge, but as to the way the appropriations, when made, have been used. The report of the committee is so plain that it will probably lead to an investigation which cannot do the port of Duluth any harm, and the recommendation that advertisements for bids for dredging be made in lake papers instead of exclusively in one inland paper, where there are no dredgeplants, if followed, must be the means of some good.

Among other things that the Chamber of Commerce did at the last meeting was to extend a vote of thanks to the MARINE RECORD for its able and generous championship of Duluth in the customs consolidation matter, now before Congress, and which has been vertually disposed of at this session by the rejection of the House amendment to the legislative appropriation bill by the Senate. It was also ordered that a copy of the MARINE RECORD be subscribed for, for the use of the Chamber. B.

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THE Ogdensburg News prints the following pertinent letter, evidently from a skipper who knows what he is talking about:

"In coming down the river St. Lawrence in a steamer, a few days ago, from Cape Vincent, I noticed that one of the black buoys on the feather bed shoal laid almost flat on the water, and apparently out of its place. There is a channel between that shoal and Carlton Island, with five fathoms of water in it, and the buoys ought to be placed in as close proximity to that channel as possible, and those in charge should see to it that the buoys are put in their proper places. The oil tender and buoy setter, Hayes, comes down on this river a couple of trips during the season and returns as fast as her steam power will allow, to the Welland canal and Lake Erie, where her headquarters are. She might enquire into what actually is needed on Lake Ontario and river St. Lawrence in the way of buoys and lights, and not be so much in a hurry."

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## THE FORT ERIE FERRY.

A meeting of the special committee appointed by the common council to confer with a committee from Fort Erie in regard to the ferry facilities between Buffalo and Fort Erie was held yesterday afternoon. Alderman Parsons acted as chairman. The meeting was attended by the members of both committees, the owners of the ferry, and Mr. E. C. Hawks, representing the Canadians. There was considerable discussion of the matter by all sides.

On behalf of the committee from Fort Erie an extract of a petition presented to the governor general of Canada, as adopted by the council of Fort Erie, was submitted. The Fort Erie council wishes a ferry of double the capacity of the present one, and desires to advertise for bids for leasing the ferry privileges. It is stated that the Canadians have full power to control the ferry privileges. The question having arisen as to whether the city had the same power, City-Attorney Hennig was asked for his opinion. He submitted a written opinion, in which he says that the city has full power to establish and regulate ferries between the two points.

The Canadians wish the boat to begin running at six o'clock in the morning and a round trip to be made every twenty minutes until eight o'clock in the evening, and a round trip every hour from eight o'clock until eleven.—*Buffalo Express, July 1st.*

## THE STOVEN BOAT.

A YARN FROM THE JOURNAL OF A SAILOR.

*Written for the Marine Record:*

Of all pursuits that men follow in order to obtain a subsistance, there is none that will compare, in danger and hardship, with that of a whaleman, and yet how little the people on the shore know of this. It is in order to let them have some insight into this business that the following narrative is written. The facts, as they occurred, were noted in the journal or log soon after they transpired:

On the 11th day of December, 1837, the good ship Croesus, of Newburgh, Captain Perkins, was cruising somewhere between the latitude of 36 and 37.8 and longitude of 60 east, in search of right whale. It was in in the forenoon and the old ship was moving along under the topgallant sails with a light breeze at the rate of about five knots the hour. The most hardened grumbler could not find fault with the day. At the fore and main topgallant crosstrees were two men on the lookout for whales.

It was now nearly four o'clock in the afternoon when the man in the main sung out, "There she blows!"

He repeated the cry regularly five or six times. All was now excitement among the officers and men. Every one was anxious to know if it was the kind of whale that was wanted.

The mate hailed the man at the mast head —"Where away is that whale? What do you call her?"

"Right whale, Sir, on the lea beam, two miles off. Look out sharply for her."

"Sing out when the ship heads for her."

"Aye, aye, Sir."

"Keep her away," said the captain to the man at the helm. "Boy, hand me the spy glass."

"Steady!" sung out the man at the mast head.

"Steady it is," answered the man at the wheel.

The captain started to go aloft. "Mr. A," to the mate, "you may square in the after yards and then call all hands."

"Forward, there!" shouted the mate. "Haul the mainsail up and square the yards! Bill!" to an old sailor--

"Sir?"

"Call all hands."

"Aye, aye, Sir. All hands ahoy," shouted old Bill, in a voice like the tempest. "stand by the boats." In less than no time the deck was alive with men.

"Boat steerers get your boats ready."

In a moment the boats were in readiness, the tubs put in and the lines bent on the harpoons, the crew standing by ready to follow the boat. Down went the boats and down followed the crew, down to the water when the word came from the captain to lower away.

"There she blows," sung out the man at the fore, "not half a mile off."

"Down helm!" shouted the captain. "Mr. A, brace the mizzen topsail! Hoist and swing the boats and lower away!"

As the boats struck the water, every man on his thwart, with his hands on the loom of the oar, and in less time than it takes to write it the three boats were cutting their way through the water in the direction of the whale.

It was my duty to steer the mate's boat, and she happened to be the fastest puller, so that, although we all left the ship together, and for a few rods kept nearly head and head with each other, still we knew well enough that as soon as the word came from the mate to "give way" we should drop the others in a moment. So we did not fret ourselves, but kept cool for a tight pull when the whale should show himself on the surface of the water again, which he did in a moment after.

"There she is," cried the mate, "and not over ten rods from the boat. Now, my dear fellows, lay back hard, I tell you! There she blows! Only give my boys and she is ours!"

The boat bounded forward like a thing of life.

"Spring like tigers," says the mate, his voice sinking almost to a whisper. I looked to see what kind of a chance I was to have, at the same time pulling at my oar with all my might. We were going on to her starboard quarter, just the chance I liked to fasten to a whale. "Stand up," shouted the mate, and in a moment I had two harpoons to the hitches into her.

"Stern—stern all!" sung out the mate, as he saw the iron in the whale. "Come here, my boy," he said to me. We shifted ends—he to the head, and I to the stern of the boat. The whale started off like lightning.

"Hold on line," said the mate, and away we shot after her, like an arrow from a bow. The mate by this time had his lance ready. "Haul me on that whale," he shouted, and all hands turned to hauling line while I coiled it away in the stern sheets.

We had got nearly up to the whale when she went to "sounding," taking the line right up and down from the head of the boat. I had two turns of the line around the loggerhead and was holding on as the boat would bear, when, all at once, another larger whale, that we knew nothing about, shot up out of the water nearly her whole length, in a slanting position, hanging directly over the boat. I threw off the turns from the loggerhead and shouted to the men to "stern." But it was of no use; she fell the whole of her body on the boat. I heard a crash, and as I went down I felt a pressure of water over my head, caused, as I then thought, by the whale's flukes as she struck. How long I was under water I know not, but I remember that all looked dark above me and I tried very hard to shove my head through, in order to breathe. At last I succeeded, but what a sight was that on which I gazed when I found myself on the surface of the water! About a rod from me was the whale that we were fast to, thrashing the water into a foam with his flukes, the ocean red with blood, and the crimson streams pouring from the wounds made by harpoons. In another direction I could see pieces of the boat floating around. At the distance of two or three miles I could occasionally get a glimpse of the ship as I rode on the top of a swell and not a human being in sight. Most forcibly did the words of the poet apply to my situation at this moment:

"Oh, solitude, where are the charms
That sages have seen in thy face.
Better dwell in the midst of alarms,
Than reign in this horrible place."

So thought I, as I struck out for a piece of our once beautiful boat, a few rods distant. The crew came up, one after another, catching at anything they could see to keep them afloat. One poor fellow came paddling along with two or three oars under him, crying out that his back was broken. Another of the crew and myself got him on the piece of a boat that we had hold of. His thigh was broken and he could not move his legs at all. The second mate soon after picked us up with his boat, and so much had we been engaged in looking out for ourselves that we did not perceive that one of our number was missing. But, alas! it was too soon found out. He was a young man about seventeen years old and did not belong to the boat, but went in the place of the midship oarsman, who was sick at the time. The whale fell directly on him and probably killed him in a moment. With what feelings we pulled round and round the spot where the boat was stoven, unwilling to believe, even after we knew there was no hope, that our shipmate was gone, never more to return. And how silently we glided alongside the ship and hoisted in our poor shipmate, now lamed for life.

Of that some of these people who look upon sailors as little better than brutes, and who know little or nothing of the kind feelings and growing affections that are concealed under their rough exteriors, could have seen what I saw on board that ship, even their hearts would melt, and they would find that it is not always the polished and educated, the smooth-faced and handsome man, that has the warmest heart or the most generous feelings. J. W. H.

## STEERING BY STEAM.

A recently invented steam steering apparatus has been given a trial on a new Sound steamer plying between New York and Boston, and according to all accounts it is very successful. The plans were made under the supervision of a marine architect, Herman Winter. The following is a complete description of the gear:

"This steerer combines the best points of a steam with a hand steerer, and so perfect and simple is the combination that either works like a charm, the changes being made, if required, in less than twenty seconds. When steering by steam the drum on which the tiller chain is wound and unwound is driven off the engine shaft by a cut worm and screw gear, with adjustable thrust bearings, and is operated by a small hand wheel in the pilot house, with Williamson Brothers' attachment.

"The gearing is automatically and so evenly lubricated that the wear is nil—there is no lost motion, and, consequently, there is absolutely no noise. The arrangement for detaching and changing from steam to hand is done by means of a screw and hand wheel, which detaches a conical friction clutch, thereby releasing the drum from the engine, and allowing it to be operated by the large hand wheels in the pilot house. It is but the work of an instant in reality to make the change. In the vessel on which the apparatus was tried all the tiller connections are of heavy chain and wire rope, and what little slack may follow use is taken up at the tiller quadrant and on the end of the wire rope. There are no rope messengers to slack up, no tackles to haul taut, and no chance for ropes to slip around the groves in the wheel. In short, in every respect this new steerer is the simplest, best, and most reliable that has yet been devised."

Captain Kirtle and J. C. Hall, arbitrators in the Lotus-Maxwell collision case, filed their report with the owners of both craft, furnishing each with a certified copy of the testimony as well as copies of their decision. They found that the schooner Lotus was at fault, and her owners, Captain Seator and George E. Wood, will be called upon to settle the bill for the Maxwell's repairs—about $300. The Lotus was damaged to the extent of about $200. The collision occurred May 2d last during a gale off Milwaukee.

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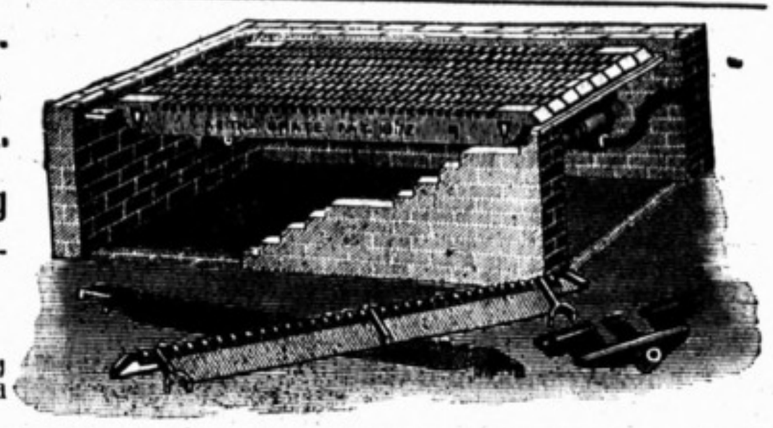

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Length over all 51 3-10 feet, breadth 13 3-10 feet and depth of hold 6 feet; draws 5½ feet of water; measures 9 24-100 (new) tons, and 18 24-100 old. Built in 1880 and rebuilt this spring, new deck frames and cabin, and machinery thoroughly overhauled. Engine is 14x14, boiler 8½ feet long and 4 8-12 in diameter. Warranted in No. 1 condition and subject to inspection. Price, $3,800. Address

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## STEAMBARGE MILWAUKEE.

Her length is 135 feet, beam 26 feet, and hold. 10 feet 10 inches. Boiler 17 feet long, 7 feet diameter; three flues, two 16 inch and one 17-inch. Engine 22x42. Carries 240,000 feet of lumber. Speed, 11 miles light, and 9 1-2 loaded. Insurance valuation, $15,300. Address MARINE RECORD Office, No. 144 Superior street, Cleveland, O.

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## A Fine Harbor Tug.

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CLEVELAND, OHIO, THURSDAY, JULY 10, 1884.


## A SEA BRAKE.

Among steamboatmen it is a well known fact that many accidents could be avoided if some effective means could be found for instantly stopping steamers, as railroad trains are brought to a stand by the Westinghouse air brake. Considering the strides inventors have made in other directions it is somewhat astonishing that this means has not been adopted before this time of stopping vessels when in danger of going into collision. The problem is not a difficult one. Friction could not be applied to steamers as to car wheels, it is true, but the advantage in the density of the element through which the vessel passes is almost great enough to counterbalance this obstacle, and science should, ere this have made use of the water to stop as well as to propel a boat. An eastern man has been inspired with an idea of this nature, and not only this he has put it into such practical demonstration that it is now in use on the steamer Florence, running on the Sea Beach route from New York city. On each side of her stern post is hinged a great fin, 9x9½, feet made of boiler plate braced with angle iron. The fins are arranged to fit in the rim of the vessel, where they are secured by simple catches, which are controlled through lines leading from the pilot house. When these fins are closed they press against springs so that when the catches are released the fins are thrown out from the side of the ship and are caught by the water. If the vessel is under headway they are instantly thrown out until they stand at right angles with the keel. As they assume this position they bring up against powerful springs. Where these springs are attached we are not now advised. The master of the Florence, Captain Simmons, testified to the effect of opposing one hundred and seventy square feet of boiler iron to the forward progress of the steamer, which was making perhaps fourteen miles an hour. Being in danger of a collision, the brakes were released, and the steamer was stopped so suddenly that some of the passengers were staggered and others almost thrown from their seats. Not only was the headway of the steamer checked but she was actually reversed inside her own length, the engines having been stopped. By the action of the springs against which the fins open, they having been compressed as the fins took the water, expanded afterward with such force as to give the Florence a perceptible reaction. The fins were at once closed by means of chains which run from their outer edges through hawser holes to the engine. We are of the opinion that some appliance will finally be adopted that will so far mitigate the sudden stopping of a steamer in the same space as to avoid throwing the passengers around the cabins as was the case at this trial, and which will evidently be necessary before the brake can be made practical. Captain Simmons, being somewhat a genius in his way, leads us to expect still greater improvement in his sea brake.

In our account of the raising of the propeller Oneida, last week, we were led into the error of giving to Captain Donnelly, the Canadian wrecker, the credit of that great and successful work, but which credit justly belongs to Messrs. Backer & Youngs, of New York, an account of whose operations will be found on another page. We were assisted in making this mistake by the statement which had obtained that Messrs. Backer & Youngs had abandoned the undertaking and that Mr. Donnelly had made a proposition to Messrs. Dimick which they had accepted, and that Captain Donnelly had commenced work. The facts, as obtained from Messrs. Dimick, bear us out in stating that there was no occasion for the proposition of Mr. Donnelly, that it had never been considered by them, and that all the credit of the undertaking is due to Messrs. Backer & Youngs. The propeller Oneida is now owned by L. Dimick & Bro., of Buffalo.

## ABOUT LAKE AND OCEAN TRAFFIC.

RACINE, July 7.

*Editor of the Marine Record.*

DEAR SIR—In your issue of July 3d, in reporting lake and ocean traffic, I would offer these few additions. I chartered the first vessel in 1876 for the European trade, the schooner Challenge, of Racine, of the burden of ninety-nine tons. She loaded deals in Muskegon for Quebec. The ocean charter from Quebec to Dublin was optional, she being under 100 tons. The charterer had the option of taking her or not, if the British Lloyds would insure her cargo and if the captain would consider her seaworthy for the voyage. She was accepted and sailed from Quebec in July, making the passage from Quebec to Dublin in eighteen days and thirteen hours, from dock to dock, fastest time ever made. I also chartered the Enterprise, Captain John Powers, now (harbor master at this port,) from Muskegon to Glasgow, also the schooner City of Manitowoc, Captain Higgie, and last the brigantine Mechanic, which I took command of in person. The Enterprise was sold after being dismasted on the voyage from Glasgow to Cronstadt, Gulf of Finland, in Russia. Dismasted in the Minch Sound, Orkney Islands, she was towed back to Belfast, where she was sold into that port and made into a collier, in the Scotch trade. The Challenge was sold in Dublin, and is yet running on the Irish coast, carrying wheat and corn, principally from the big ships that unload at that port to other ports in Ireland. The City of Manitowoc was on her third voyage to Europe, got ashore on Anticosti Island, and was afterward saved by wreckers and taken to Quebec, out of which port she sails under another name. The Mechanic was sold in London in 1877, and was sent to Pernambucco, Brazil, at which port she was condemned and sold as unseaworthy, and broken up.

As regards the brigantine Waucoma, she was sold on her arrival, and bought into Belfast, sent to Troon, Scotland, and loaded coal for Demerara, West Indies. Before getting clear of the channel she went ashore on the coast of County Down, Ireland, and became a total wreck. The Middlesex was the lake craft that was abandoned at sea, not the Waucoma, as I saw the Waucoma after she was stranded, in 1877. I also saw another vessel in Swansea, Wales, in 1877 from the lakes, the schooner Mary L. Higgie, of Chicago, Captain Hatch. She went to the Cape of Good Hope, and afterward brought a return cargo to Montreal.

As regards the future of the lake and ocean traffic, when the St. Lawrence river canals are deepened you will see a class of vessels, both steam and sail, built for the trade, that will take cargoes from our lake ports direct to Europe and bring passengers in return. The immigration in the next 100 years will far surpass that of this century.

* * *

The Seaverns, with a cargo of supplies, is sunk in 120 feet of water off Michepicoten. The tug International has gone to release her and will also attempt the release of the steambarge Georgian, ashore at Peninsula Harbor. The Georgian is loaded with oats. She is almost on ends, her bow being out of water, and her stern in forty feet.

## LAUNCH OF THE GEORGE SPENCER.

On seeing the above name for Captain Thomas Wilson's new steamer, launched yesterday at Quayle's Sons' shipyard, our readers will think that Captain Wilson has departed from his custom of making all his vessels sail under Indian names. Such is not the case, however. It is well known that Captain Wilson was raised by the Indians of the Northwest and could follow a trail with the best of them, and was never stumped to do sixty miles a day. After beginning his sailing career, and on returning to the settlements, after having been caught in the ice on Lake Superior in the winter, where he was obliged to lay up his vessel, he would generally go on foot, and it was a good strider who could keep pace with him. But to revert to our title. George Spencer lives in Duluth, and he and Captain Wilson have long been intimate friends, having been on the war path together, which accounts for the honor Mr. Spencer had conferred upon him in naming this fine steamer. He said that as he had on several occasions been taken for an Indian, it would be very appropriate to call the new steamer George Spencer, although the name did not have the peculiar syllables which constitute an Indian name—Wallula, Minnehaha, Hiawatha, Tacoma, Kasota—quite as fine a fleet as there is on the lakes, but we are of the opinion that George Spencer spoils the music, even if he has been taken for an Indian. We do not remember ever having seen such a crowd of people at any launch before in Cleveland, the banks along the river, the docks and bridges and every available place being lined with interested spectators. Not only this, but the river was a busy scene, and one could imagine that all the tugs in the harbor intended to be present with a tow, the R. K. Hawley being the most prominent, as she did not know where to put the schooner James F. Joy, lumber laden; the irrepressible Fannie Tuthill was also present with the lumber laden Galatea, the Maggie Sanborn with the Exile, the Charles Henry with two mud scows, the C. Castle with two canal boats, the Starkweather with a dredge and the Dreadnaught without anything. The lumber laden schooner Louisa was also brought in, but she was tied up and the tug got away before we could tell the color of the smoke. Altogether it made a busy scene, and the new steamer was welcomed in a gracious way by every one of them as she slid down the ways and into the water without a jar, a mode of launching which Quayle's Sons' have got very fine. As the George Spencer settled in the river she drew 4½ feet forward and 9 feet aft, and carried her lines very nicely. She is somewhat smaller than the Kasota, being 245 feet over all, 230 feet keel, 37 feet beam and 19 feet depth of hold; she has steel arches on her ceiling and on the frames outside, bolted through and through; and carries three masts. Her keel was laid on the 18th of February, and her first frames raised on the 25th. Taken altogether, the George Spencer is another ship that Quayle's Sons may well be proud of having been the builders.

The engine, which was built at the Globe Iron Works, is a fore-and-aft compound, 27 and 50 by 36 inch siroke, cranks opposite, with steam reversing gear, making it a duplicate of the engine built by this firm for the Robert Wallace and similar to the machinery for Captain Wilson's other new steamer, the Kasota. The Spencer has a hoisting engine on the spar deck with a pony boiler sufficient to run it; the bilge and fire pump is operated by the hoisting engine. She has one return flue boiler, Otis steel, 10½ feet in diameter by 17 feet long, with double furnaces and will carry 100 pounds of steam. There is a wrought iron pan and iron deck beams under the boiler and Beache's hot air casing over the boiler.

The outfit of the George Spencer includes that necessary adjunct to safe navigation, the Providence ship windlass, from the American Ship Windlass Company, of Providence.

Captain Thomas Murphy; last year master of the Minnehaha, will sail the George Spencer.

THE New York Mail and Express vigorously calls upon ocean steamers to cast anchor in a fog, saying that the line which announces that this will be done will gain much of the confidence of the people.

## THE CLEVELAND REGATTA.

The faces of the yachtsmen who desired to participate in the yacht race on the 4th wore gloomy frowns when the rain began to fall, but before the day was far advanced the sky began to brighten, and ropes were unknotted, sails shaken out, and the boats bailed. The visiting yachts, with strange colors at the masthead, seemed proud of the emblems of victory which some of them carried, and the masters were pleased that their desire to add to them was about to be realized.

The boats were brought round to the outedge of the breakwater, and fastened in a straight line. The boats and their captains were as follows: First class, Ives, Captain Ives, of Detroit; Louise, Captain Hart, of Detroit. Second-class, Fanchon, Captain Ennis, Put-in-Bay; Lulu, Captain Henry Gerlach, of Cleveland; Scud, Captain Ellsworth, of Buffalo; Charm, Captain Klauser, of Toledo; Rover, Captain Overbeck, of Cleveland. Third-class, Lady Ida, Captain Lyman, of Cleveland; Freddie, Captain Brennan, of Cleveland, and Trio, Captain Kendall, of Cleveland.

The lake seemed in a happy mood, and by 11 o'clock its surface was as smooth as a meadow. The tug Forest City, bearing Captain Judson, Mr. R .E. Mix and Mr. M. A. Bradley, steamed out of the harbor, and word was passed along "all ready." Then the signal gun was fired, and at the same instant the boats shot away into the water. A strong, steady breeze was blowing from off shore, and the boats glided rapidly away from their moorings. Friends of the different participants lined the breakwater and the piers, and cheered as their respective favorites were discerned momentarily ahead in the race. The course had been staked out before the race, and each skipper could see what was before him.

It was a diamond shaped track, five miles on each side, or twenty miles from the start to the wind-up. The lake could not have been in a better condition. Bye and bye, however, the wind died down, and the boats moved more slowly. It livened up again a little later, and the winning boats shot ahead. The Lulu was perhaps the most promising local craft, and for a time hopes were entertained that she might win. The Fanchon was, however, the first boat to reach the home stake, making the distance in three hours, fifty-two minutes and fifteen seconds. The Lulu was only about four minutes behind her, while the other craft were strung along from ten minutes to an hour and a quarter behind her. The time occupied by the different boats in making the distance was as follows:

| | H. | M. | S. |
|---|---|---|---|
| Fanchon, Captain Ennis | 3 | 52 | 15 |
| Lulu, Captain Gerlach | 3 | 56 | 31¾ |
| Scud, Captain Ellsworth | 4 | 16 | 38½ |
| Charm, Captain Klauser | 4 | 20 | 33⅓ |
| Rover, Captain Overbeck | 4 | 50 | 20 |
| Ives, Captain Ives | 5 | 9 | 35 |
| Lady Ida, Captain Lyman | 5 | 13 | 33 |
| Freddie, Captain Brennan | 5 | 21 | 56 |
| Trio, Captain Kendall | 5 | 22 | 43¼ |

After the race a supper was served at the club house, where the prizes were awarded, the Fanchon taking first money and the Gardner Cup, and the next five boats in the order above given the $175, $50, $40, $25 and $10 prizes.

[*Detroit—Continued from 1st Page.*]

Freights at this port are scarce, and but one cargo of staves has accumulated for a month past. The arrivals of coal have been very limited and, aside from lumber for owners, none arrives for sale on the market, as has been the case in times past, and considering the values of commodities, freights are nominally fair.

The tug H. Ballentine, which has been engaged in rafting on Lake Superior for some time past, has returned to this port, where she is owned, for overhauling, and will retire until business improves.

There are seven or eight harbor tugs owned at this port, and as stated in a previous letter, the times do not seem to improve with them. On the contrary, either one of them could perform all the work required here, but all are gritty and do not feel disposed to lay by, and as forming a combination is simply among the impossibilities, all are losing money. Captain Mills stoutly considers he is rightfully ordained, and will not yield worth a cent.

Charters are about at last quotations, and have not improved. Some are given as p. t., which are of no interest to the general reader, and are not worthy of special notice. Lumber from Bruce mines to Walkerville, opposite this city, is quoted at $1.75; from Penetanguishine, $1.50; cord wood from Rogers City to Detroit, $2 per cord; salt, from Tawas to Green Bay at 15c per barrel.

The steamer St. Paul, from Lake Superior, arrived this (Tuesday) noon.

The barge Magnetic, which follows in the wake of the steambarge Continental, is reported stranded in the Sault river, but with

good prospects for getting off without damage. There was a high wind at the time, which was the principal cause of the disaster.

The upward bound steamers to Lake Superior and Lake Michigan have, with few exceptions, very light freights, and in fact are in ballast trim.

There is much complaint of late, on the part of the superintendent of the St. Clair Flats ship canal, owing to steamers passing through that thoroughfare under full steam, thereby creating a heavy swell which washes away the banks on either hand. There are instances also where steamers pass each other while in the canal, creating commotion as well as confusion. Now all this is in direct defiance of the rules governing that thoroughfare, which are conspicuous on large signs at either end of the canal. The names of some of these violators are on record, and in due time they will be brought to face the music.

A Canadian has just informed me that there is ten feet of water at the entrance of Port Burwell harbor at the present time, but as there is no call for vessels visiting that place short of its being a harbor of refuge, the item has little or no interest.

J. W. H.

CAPE VINCENT.

*Special to the Marine Record.*

The tug Proctor, Wm. Leonard, master, transported in the month of June from Charlotte, Fair Haven, and Sodus Point to St. Lawrence river ports 30,000 tons of coal 16,000,000 feet of lumber from Brockville to Oswego, beside doing a large portion of outside towing. July 5th the tug Wm. L. Proctor took a party of gentlemen from Syracuse, Montreal and Ogdensburg to Brockville in fifty minutes and returned in forty-five minutes, a distance of twelve miles each way.

A heavy northeast gale prevailed at this port Saturday, doing considerable damage. The schooner Hod Dodge, Captain W. Richards, ran in here with her headgear carried away and leaking badly.

Captain Tony Weaver will command the George Cofe this year, with Joseph Bearns, mate.

Passed up, propeller Monteagle and schooner Mystic Star. Passed down, Island Belle and schooner P. M. Rogers.

H. W. R.

LORAIN.

On Saturday night the tug Jessie, with the schooner Wawanosh in tow, left here about 6:30. They had got but about two miles out when they were forced, on account of the heavy sea and wind, to turn back. A heavy sea was running across the piers and the Jessie, unable to shorten her tow line, could not hold the schooner up against the heavy sea and seeing that she was about to strike the east pier, cut the tow line. The Wawanosh let go both anchors and rounded to just east of the east pier. The tug Chamberlain went out in answer to a signal from the Jessie to assist in bringing the Wawanosh in, but for some reason she did not attempt to give the Chamberlain a line until after she had brought up outside of the pier. The Chamberlain after hard work succeeded in getting her line from the pier where it had caught when cut by the tug Jessie and started to tow her in. The Wawanosh had paid out about fifteen fathoms of chain and stood ready to slip her anchors when it was discovered the Chamberlain had got the line in her wheel and was disabled. The schooner and tug both drifted toward the beach, the fifteen fathoms of chain allowing them to touch bottom but not hard. They remained in this position until about 10 o'clock when the sea had run down sufficiently to allow the Chamberlain, which had worked around between the Wawanosh and the pier, to pass a line to the pier and then to the Jessie. The Jessie then ran outside and towed the Chamberlain into the harbor. The Wawanosh remained outside until morning and was towed in about 9 a. m. by the tug James Amadeus. The Wawanosh was damaged but little. She is bound for Port Edward with her cargo of 817 tons coal. A diver succeeded in removing the line from the Chamberlain's wheel.

SHEBOYGAN.

The government steamer Fessenden struck a rock near Prentiss Bay Tuesday night and immediately sank in twelve feet of water. Steam pumps and a tug will be sent to her.

MILWAUKEE.

*Special to the Marine Record.*

Repairs have been completed at Wolf & Davidson's yard, on the schooner America, in collision with the H. C. Richards recently, and she has departed for Manistee.

Ore freights are on the basis of 90 cents from Escanaba to Ohio ports, and several charters were made at that rate, but shippers are not over anxious to secure tonnage.

At 10 o'clock yesterday the United States Marshal offered for sale in the United States Court room the lumber barge Saginaw. The case under which the order of sale was granted was brought against the Saginaw on a claim for $500 by Captain Botsford.

The wrecking tug Leviathan has released the schooner Lincoln Dall, which went ashore at Washington Island last fall, and is expected to arrive here with her in the morning. The Lincoln Dall was built at Chicago by Miller Bros. in 1869, is 206 tons burden, classed B1, and valued at $5,000.

The Independent Tug Company purchased the wrecked schooner Two Brothers as she lay sunk in the bay from Captain Wright and Monday afternoon tugs pulled the spars out of the bed, when she righted up. The old hulk was then towed on the beach abreast of the life saving station, where it will be stripped of everything and then abandoned. The Two Brothers has been in service on the lakes for forty-six years, and for a number of years was owned at Chicago. She was built at Prescott by Weeks in 1838, and was 204 tons burden.

The schooner North Cape, having received new spars and repaired the other damage sustained in the collision with the schooner Ahira Cobb, went to the elevator and reloaded her cargo of wheat for Buffalo.

Milwaukee Shipyard Co. The new steambarge building at the company's yard is in frame and has considerable of her outside plank on, she will be completed in September. The barge Monitor, which was on the beach at the North Manitous, is in drydock getting general repairs. The sloop yacht Idler, which was dismasted when about to take part in the yacht race Saturday, got a new mast.

At Wolf & Davidsons shipyard. The schooner North Cape, H. Peterson has received new main and mizzen masts and mizzen topmast and some rail and stanchions on the starboard side. The steambarge Oscar Townsend was in drydock and got a new fore foot, some new keel forward and aft, some new plank in her bottom, new stern post, shoe, rudder and rudder stock and some fastening and calking. The schooner America got a new fore mast, fore topmast and jibboom. The new schooner James Mowatt is getting her cabin completed and her spars put in. She will be a splendid vessel when ready for sea, no expense being spared to make as complete a schooner as any on the lakes.

The yacht club regatta, held on Saturday last, resulted in a match between the two Chicago yachts Wasp and Verve. The Idler of the Milwaukee yacht club also started but was soon out of the race through being dismasted. The Wasp sailed past the starting point at 11:36:20 the Verve at 11:38:05, for a race over a triangular course of about eighteen miles. The Wasp steadily increased her lead and came in about 14 minutes ahead of the Verve after a very exciting race sailed in a heavy northwest gale. Both yachts were well handled and did their best to win and practically settled which is the better yacht. Captain Prindiville showed that he could outsail the sharp little cutter at every point when there was enough wind and sea to make good judgment and good seamanship a necessity. The cause of the Verve's defeat lay in the fact that she has not got enough beam and carried too much sail. That her crew handled her well there is no disputing; they did more, perhaps, than any other crew could have done. But the fault lay in the boat. She would bury herself in the seas and her heaving boom, dragging with it the leach of the mainsail, would stick in the water three or four feet. Then the boat would almost lose her headway. The fact of the matter is she has not enough hull, not enough displacement to be a success against such a boat as the Wasp, much less against the Idler and Countess. In perfectly smooth water and with a slight breeze she would unquestionably outsail any of her rivals, because she can carry more canvas for the size of her hull than any of them. The Chicago yacht club will probably lose the Wasp, as Captain Prindiville is now considering an offer of her purchase by two Milwaukee gentlemen. The Wasp and Verve will have another contest at the Chicago yacht club regatta on the 12th and will then be able to decide which is the fastest.

W. T.

SANDUSKY.

*Special to the Marine Record.*

The steambarge Norma Captain Wheeler, is on the drydock at Captain Monk's yard where she is having a new wheel put in.

The steambarge Red Jacket is undergoing a through overhauling and repainting.

Captain Wheeler of the steambarge Norma brought the imformation to the city on Monday that Charles Weinrich employed by Ohlemacher Bros. at Marblehead, was drowned at that place on Saturday. The unfortunate man leaves a wife and three children in destitute circumstances, Captain Wheeler says subscriptions were being raised for the immediate relief of Mr. Weinrich's family.

The steamer R. B. Hayes, Wm. J. Slackford, master, will make regular trips to the favorite summer resort, Cedar Point, during the season.

The case of the State of Ohio vs. William J. Fagan was set for hearing in the Probate Court, Sankusky on Tuesday Captain W. J. Fagan has been for many years master of some of the best craft on the lakes, and since the William Edwards was built was master of her up to the opening of the present season. The case was brougtht by Valentine Fries, owner of the Edwards. The warrant charged Fagan with a breach of the peace. The case was called, and the defendant took not only the counsel of the State by surprise, but his own as well, by claiming his constitutional right in objecting to testimony in the form of depositions. He said he wanted to meet his accusers face to face. These depositions being very material to the prosecution, they were unwilling to proceed to trial after Judge Merrill had decided in favor of Fagan's objection, and asked a continuance. Captain Fagan was ready for trial, but the prosecution insisted on a continuance, which was granted, the date being fixed October 7th.

TRAVERSE CITY.

*Special to the Marine Record.*

Hannah, Lay & Co. now own three steamers. The largest, the City of Traverse, runs between Chicago and Traverse City, leaving Chicago every Saturday evening at 7 o'clock, arriving at Traverse City Monday morning in time to connect with the steamer; City of Grand Rapids, running between Traverse City and Mackinaw. The steamer Faxton runs from Traverse City to Petoskey, touching at intermediate points, makes three trips per week, and close connection every Wednesday evening with the City of Traverse, going to Chicago.

S.

ESCANABA.

*Special to the Marine Record.*

It will occupy the balance of the week to load the vessels in port. As little work was done in the mines last week it will be quite a while before they catch up with the demand.

LUDINGTON.

The schooner Topsy, of Manistee, laden with shingles for Chicago, sprung aleak Sunday noon off Big Point Au Sable, and was towed into this port and pumped out. She will be towed to Chicago.

OSWEGO.

The United States signal station will be removed to the custom house, July 31, where there will be more commodious quarters.

The yacht Maud, in getting out of the slip on the Fourth, struck a bolt in Bond's dock, filled and sank. The yacht will be repaired at once.

PORT COLBORNE.

Messrs. Armstrong Matthews and Carter Brothers, tug owners of this place, have decided to-day, owing to the dull times and low freight, to reduce the rate of canal towing from 20 cents per ton loaded to 15 cents per ton, and from 16 cents per ton light to 12 cents per ton.

MARQUETTE.

The Forest City and H. H. Brown arrived on the 7th. The captain of the Brown reports the barge Magnetic, in tow of the Continental, aground on the flats in the Sault river. A heavy wind was blowing at the time. The Continental released her.

BUFFALO.

*Special to the Marine Record.*

The schooner J. S. Austin, which was on the South Manitou some time ago, has gone into one of the Union docks for calking.

The schooner E. A. Nicholson is out of drydock and will complete her repairs outside.

The tug hull brought through the canal from New York by Thomas M. Ryan, was hoisted out of the Evan's slip at Gibson's shipyard, preparatory to a rebuild.

The soldiers' and sailors' monument at this port, the corner stone of which was laid July 4, 1882, was unveiled on the 4th. The statue is eighty-five feet high to the top, and cost $50,000.

A telegram to Messrs. Crosby & Gunning, on Monday, stated that the little Canadian steamer Erie Queen had sunk on the St. Lawrence river near Brockville, Ont., on Sunday night, in fourteen feet of water. She is loaded with wheat, and was bound from Whitby, Ont., to a port on the St. Lawrence. The pool has a policy of $4,000 on the hull, and the Thames & Mersey a policy on the corgo. Captain George McLeod, of Smith & Davis' office, left for the scene last night. The Erie Queen was built by Reyan, at Port Bowan, in 1874, and is owned by Braun & Co., of that place, valued at $7,000, and was ratted at A2½. She was 263 tons burthen, and has traded from this port.

Charters are now very light everybody along the docks complain of the pervailing dullness. There is very little coal here and but a light tonnage. The following engagements were reported yesterday; propellers Chisholm, Clyde, Oceanica, and Fred Mercur to Chicago, 80 cents; propeller D. Ballentine and consort Northwest to Milwaukee, 80 cents; and schooner Senator Blood, Sandusky, 30 cents. Canal freights were weak 3½ cents being offered, and boatmen asking 3¾ with no loading. A small amount of rye was shipped at 3¼ cents, but there was very little movement.

The barge R. J. Carney is taking on board the boiler for Captain James Davidson's new steamer being built at West Bay City. There are two, each 8½ feet shell by 17 feet long, made of 9.16 inch steel. The engine for the vessel is a fore-and-aft compound, 28 and 52 by 45 inches. The Carney has just been thoroughly repaired at the Union shipyard.

PORT HURON.

The tug Robb, bound down with lumber barges, broke her cross head off Lexington last night, and was towed here by the steambarge I. May.

The cutter rigged sloop yacht Mable, from New York, was anchored in St. Clair river opposite the Port Huron & Northwestern railroad depot, Saturday, bound for Chicago but waiting for weather.

LIFE SAVING APPARATUS.

The Simplest and Cheapest ever Invented.

Being Self-acting, it Requires no Attention After the Tube Reservoir has Once Been Filled with Sperm Oil.

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*DEVLIN & CO.,*

VESSEL AGENTS.

General Marine Brokerage.

Grain, Ore and Lumber Charters Negotiated.

*Room 2, 156 Washington St.,*

CHICAGO, ILL.

## THE SCIENTIFIC PRINCIPLES OF SAFETY.

LOCKPORT, June 30.

*To the Editor of the Marine Record:*

Your editorial comments on my article in the May number of the American Aquatic Magazine, are to the point, but do not cover the whole ground, as the inference may be drawn, that it would cost more to build from scientific principles of safety, that it costs to build others as now used; or, in other words, that it would call for a sacrifice to add safety. But such is not the case. Science is the fountain head of safety and economy, which is proved by all labor saving machines, the works of science. The safety ship will be one of the highest order, and be posessed of the greatest degree of economy, ever in a ship. In fact one half of the power now used for propulsion will give a greater degree of speed. The principles to do this work will be found in the columns of the future numbers of the American Aquatic Magazine, begining with the August number. The question now is, what is the kind of work called for? The loss of the Canadian brig Sherwood, reported a short time ago, throws much light on this subject. She went down in mid ocean, only one survivor. It is conceded or claimed that this disaster was caused from lack of stability. I quote from an article in the New York Herald "Professor Elgar, of the London Institution of Naval Architecture, recently stated that evidence at the board of trade inquiries into shipwrecks, is constantly pointing to instability as cause of loss." As vessels are now built and formed, how is stability attained? There is no point better known by nautical men than that it is attained by ballast, loading This brig was loaded with coal, good ballast, and must have had all the stability possible to give her. The cause of the disaster must be looked for from some other cause, as it is stated that she did not capsize. The fact is clearly pointed out that she had encountered a severe gale, as thousands of others have done, and had become unmanageable, a helpless mass, and was destroyed from her own inertia; and had her stability been of such a degree that if in still water her masts would have been broken off before she could have been hauled down to her scuppers by them, it would not have helped her in the least, her stability would have been of no account, created as it was by counterpoise. Two more helpless things than an unmanageable ship and rolling waves do not exist. The wave has no control over its own motion; it must roll onward by the power that impels it, and is driven on to its own destruction when it meets any thing that it can not resist; an unmanageable ship, as now formed, can not resist the motion of the wave. But science gives the safety ship a form to meet the motion of the wave and subdues or quiets it. Also powers to help herself under all circumstances against the motion of the waves. Her power of motion will be steam, and auxiliary sail. Her power for protection will be rightly located buoyancy, and stability, not derived from counterpoise. In fact her stability will be at its acme when she has no load, as it is derived from buoyancy only. A glance at the Sherwood's form will make this clear. As she came from the hands of the builder light and buoyant she had no stability. To give her stability she must be ballasted, loaded; this must beat her bottom; in doing it a portion of her buoyancy has been destroyed, driven up through her hatches, and when loaded with an eye to stability, she then has no buoyancy below the surface of the water, none that rough water can act upon to keep her safe; in fact it can only reach it at her full extremities above water, and in doing so causes her buoyancy to be the agent of her destruction. Such was the condition of the Sherwood, a helpless mass in the troughs of the waves. The safety ship is on principles the direct opposite of the Sherwood, her buoyancy is such as to remain in tact at all times, loaded or light, and is beneath the surface, and above it in position to always meet all motions of the waves, in safety, and the wave can never mount it, nor strain it. In fact she is clothed with buoyancy. Her form is such that the wave can not come against her as it does against a rock, or the side of a ship. On the contrary, as it reaches the ship she gently disposes of it and cuts off its crown with her under water plough of buoyancy, and her above water wings of buoyancy cause it to recede from her to the hollows of the waves; or, in other words, to its level. This is now no longer a myth to be talked about, no longer a mooted question; science has now settled it practically, and a ship can now be built indestructible against the forces of nature. And in point of cost less than ships as now built cost, and be run at greatly reduced cost, from what they now are run. In them will be found the acme of speed with equal power, and equal displacement.

Yours, Truly,

JOSEPH W. NORCROSS.


**CUYAHOGA WORKS,**

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MANUFACTURERS OF ALL KINDS OF

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PLEASURE BOATS AND SAILING AND STEAM YACHTS, YAWL BOATS, SPOON OARS, STEERING WHEELS, ETC.

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BUTTS COAL CO.,

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Only Miners of

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**THE GLOBE IRON WORKS.**

SECOND HAND TUBULAR BOILER, 44 inches diameter, 43 tubes 3 inches diameter and 12 feet long, steam drum 30 inches diameter, 40 inches high; front grates, fittings and breechings; good order.

SECOND HAND MARINE BOILER, in good order; Shell, 7-16 inch iron plate; diameter, 9 feet 6 inches. length, 18 feet; 129 tubes 4 inches in diameter, 11 feet 4 inches long, three flues 18 inches diameter; two flues 16 inches diameter, two flues 10 1-2 inches diameter; fire box, 6 feet long, 4 feet high; steam chimney, 7 feet high.

SECOND HAND MARINE BOILER four feet wide, 6 1-2 feet long, 5 feet high, sixty-four 2 1-2 inch tubes 60 inches long, cast iron breeching, good as new.

SECOND HAND MARINE ENGINE; double direct-acting 8x8 inch cylinder, shaft and wheel for yacht or tug; good as new.

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A Full Line of Vessel Supplies,

Lubricating and Lamp Oils of the Best Quality,

AND A GENERAL LINE OF LAMPS, CROCKERY AND TABLE CUTLERY.

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From 10 to 25 per cent Saved

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*OPPOSITE FRED GROCH'S COAL OFFICE.*

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MARINE SUPPLIES A SPECIALTY.

*STEADY STARBOARD*

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**DAVID BARNHISEL, Agent.**

DOMESTIC & STEAM COAL

Cleveland, Ohio


## TRAVELERS' REGISTER.

### LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 11, 1884, at 12 o'clock noon the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper:

| Eastward. | Arrive | Depart. |
|---|---|---|
| No 4, Fast Limited Express | *1 10 A M | *12 05 A M |
| No 8, N Y, B & A Express | *6 35 A M | *7 00 A M |
| No 26, Elyria Accommodation | †8 05 A M | |
| No 35, Buffalo Ac'm via Sandusky | †10 35 A M | †10 50 A M |
| No 35, Toledo Accom via Norwalk | †10 35 A M | †10 50 A M |
| No 12, N Y & B Fast Express | *1 55 P M | *2 25 P M |
| No 14, Special N Y & Bos Expres | | 5 00 P M |
| No 2, Night Ex via Norwalk | 9 40 P M | †10 00 P M |
| No 22, Night Ex via Sandusky | †9 42 P M | |
| No 26, Conneaut Accommodation | †4 25 P M | |

| Westward. | Arrive. | Depart. |
|---|---|---|
| No 1, Fast Limited Express | *11 55 A M | *12 05 A M |
| No 23, Mich Express via Sandusky | *2 15 A M | *2 35 A M |
| No 3, Chicago Express via " | §6 05 A M | 6 30 A M |
| No 25, Mich Accom Norwalk | | †6 10 A M |
| No 21, Toledo Ex via Norwalk | †12 55 P M | †3 20 P M |
| No 5, St Louis Ex via Sandusky | †12 15 P M | 12 40 P M |
| No 9, Chi Pac Ex via Norwalk | *6 06 P M | *6 30 P M |
| No 31, Elyria ac to Elyria only | | †4 30 P M |
| No 27, Conneaut Accommodation | †8 10 A M | |

Sunday train for Nottingham—Depart 8:30 a. m. and 1:45 p. m.; returning, leave Nottingham at 9:05 a. m. and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, § daily, except Monday.

For full information as to trains and connections apply at the new city ticket office, corner Seneca and St. Clair streets, Lake Shore block.


**BEE LINE**

CLEVELAND, COLUMBUS, CINCINNATI & INDIANAPOLIS.

Commencing Sunday, June 8, 1884, trains of the Bee Line—Cleveland, Columbus, Cincinnati & Indianapolis Railway—will leave and arrive at Cleveland as follows. CENTRAL STANDARD TIME, 33 minutes slower than Cleveland time:

| | Depart |
|---|---|
| No. 3, Columbus, Cincinnati & Ind Ex | 7:40 A M |
| No. 23, Galion & Wheeling Express | 6:40 A M |
| No. 9, Col., Cin., Ind & St. Louis Ex | *6:40 P M |
| No. 5, Col Cin., Ind. & St. Louis Express | *2 35 P M |
| No. 27, Galion & C.L & W. Acc | 4:00 P M |
| No. 29, Massillon & Ulrichsville Ex | 5:00 P M |
| | **Arrive.** |
| No. 8, Col, Cin, Ind. & St. Louis Exp | *6:40 A M |
| No. 20, Ulricsville & Massillon Ex | 9:00 A M |
| No. 2, Col. Cin. & Indianapolis Express | 9:50 P M |
| No. 14, St. Louis, Ind.. Cin. & Col. Ex | *4:45 P M |
| No. 22, Galion Acc | 10:00 A M |
| No. 26, Wheeling Accom | 4:30 P M |
| No. 4, Col., Cin & N. Y. Express | 1:15 A M |

Trains marked * daily, all other trains daily except Sunday

E. B. THOMAS, General Manager. O. B. SKINNER, Traffic Manager.

A. J. SMITH, General Passenger Agent.

CLEVELAND, OHIO.

**New York, Pennsylvania & Ohio R. R.**

NEW YORK, BOSTON AND THE EAST.

The Shortest and Quickest Route to Pittsburg, Washington and Baltimore and the Southeast.

Central or Ninetieth Meridien time. 33 minutes slower than Cleveland city time.

Until further notice trains will leave from the new Central Depot, South Water street and Viaduct as follows:

6.50 a. m. ATLANTIC EXPRESS—(Daily) Pullman sleeping and hotel coaches from Leavittsburgh 8:35 a. m. to New York, Albany and Boston without change. Arrive at Meadville at 10:40 a. m. (dinner) Franklin at 12:08 p. m, Oil City 12:30 p. m, Corry 12.35 p. m, Jamestown (Lake Chautauqua) 1.35 p. m, Buffalo 5:50 p. m. Rochester 8:20 p. m.; Hornellsville 6:00 p m. [supper]; Corning 7:25 p. m. Elmira 8:05 p m. Binghanton 10:05 p. m., Albany 5:00 a. m. Boston 1:45 p. m.; arriving at New York 6:15 a.m.

2:20 p. m. LIMITED EXPRESS—Through Pullman sleeping coach from Cleveland to New York. Arrives at Meadville at 6:30 p. m, Jamestown 8:47 p. m., Salamanca 9:45 p. m., New York 10:10 a. m.

11:00 p. m. NIGHT EXPRESS—(Daily except Sunday) Seeping coach from Cleveland Hornellsville. Arrive at Youngstown at 1:50 a. m., Meadville 3:25 a. m., Corry 4:59 a. m. Jamestown 5,57 a. m, Buffalo 9:20 a. m., Rochester 12:58 p, m., Hornellsville, 11:00 a m, Corning 12:07 p m, Elmira 12:40 p. m., Binghampton 2:19 p m., New York 9:10 p. m. Arrive at Pittsburgh 5:50 a m., without change.

2:20 p. m. PITTSBURGH EXPRESS — Daily — Through without change, Parlor car attached. Arrives at Youngstown 5:00 p m., Pittsburg 8:02 p. m., Washington 7:09 a. m, Baltimore 8:19 a. m.

4:11 p. m. MAHONING ACOMMODATION — Stopping at all way stations, arriving at Youngstown 6:55 p. m., Sharon 8:01 p. m., Sharpesville 8:10 p. m.

6:50 a. m. PITTSBURGH EXPRESS — Daily — Through without change. Arrives at Youngstown 9.30 a. m., Sharon 10:30 a. m., Sharpesville 10:40 a. m., Pittsburgh 12 45 p m., Returning, leaves Pittsburgh at 4:15 a. m., 7:45 a. m., 12:55 p. m., and 3:45 p m.

10 35 a m. YOUNGSTOWN AND PITTSBURGH ACOMMODATION—Stopping at all Way stations, arriving at Youngstown 1:40 p. m., Pittsburgh, 5.45 p. m.

Trains arrive at Cleveland, 6:15 a. m., 6:30 p. m., 10.20 a. m; 1:05 p. m., and 9:45 p. m,

☞ This is the only route by which passengers can reach Corry Elmira, Binghampton, New York City and intermediate points without change. No change to Boston and New England Cities.

Baggage checked through to all points East

Through tickets and information regarding the route can be obtained at the office 131 Bank street, and at new Depot of N. Y., P & O R R., South Water street and Viaduct, Cleveland, O.

A. E. CLARK, Gen'l Pass'r Ag't Cleveland, O.
J. M FERRIS, Gen'l Man'gr, Cleveland, O.
M. L. FOUTS, Passenger Agt, 131 Bank St. Cleveland.

**The Nickel Plate!**

NEW YORK, CHICAGO & ST. LOUIS RAILWAY.

The passenger equipment of this New Trunk Line is all new and is supplied with the latest appliances necessary to safe speedy and comfortable travel.

At Chicago, passenger trains arrive at and leave from the Union Depot, Van Buren street.

Following is the time in effect JUNE 1. 1884, and until further notice:

GOING EAST.

| | | | |
|---|---|---|---|
| Lv. Chicago | 7.50 a. m. | | |
| Arr. Valparaiso | 9.45 " | | |
| " Fort Wayne | 1.30 p. m. | | |
| " New Haven | 2.05 " | | |
| " West Leipsic | 3.56 " | | |
| " Arcadia | 4.49 " | | |
| " Fostoria | 5.00 " | | |
| " Green Springs | 5.45 " | | |
| " Bellevue | 6.10 " | | |
| Lv. Bellevue | 6.20 " | 7.55 a. m. | |
| Ar. Lorain | 7.50 " | 9.16 " | Accom. |
| Arr Cleveland | 9.02 " | 10.22 " | |
| Lv. Cleveland | | 10.27 " | 3.52 p. m |
| Arr Painesville | | 11.33 " | 5.05 |
| " Ashtabula | | 12 25 p. m. | 6.03 |
| " Conneaut | | 12.50 " | 6.30 " |
| " Erie | | 2.09 " | |
| " Dunkirk | | 3.47 " | |
| " Buffalo | | 5.20 " | |

GOING WEST.

| | | | |
|---|---|---|---|
| Lv Buffalo | 9.50 a. m. | | |
| Arr Dunkirk | 11.24 " | | |
| " Erie | 1.23 p. m. | | Leave |
| " Conneaut | 2.20 " | | 6.15a. m. |
| " Ashtabula | 2.51 " | | 6.46 " |
| " Painesville | 3.44 " | | 7 43 " |
| " Cleveland | 4.52 " | | 8.55 " |
| Lv Cleveland | 4.57 " | 6.47 a. m. | |
| Ar. Lorain | 6 12 " | 7.35 " | |
| Arr Bellevue | 7.35 " | 9.10 " | |
| Lv Bellevue | | 9.20 " | |
| " Green Springs | | 9.44 " | |
| " Fostoria | | 10.22 " | |
| " Arcadia | | 10 34 " | |
| " West Leipsic | | 11.30 " | |
| " New Haven | | 1 35 p. m. | |
| " Fort Wayne | | 1.50 " | |
| " Valpraiso | | 5.42 " | |
| " Chicago | | 7.50 " | |

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of ticket desired Baggage checked to destination

For information, call on nearest agent of the Company, or address

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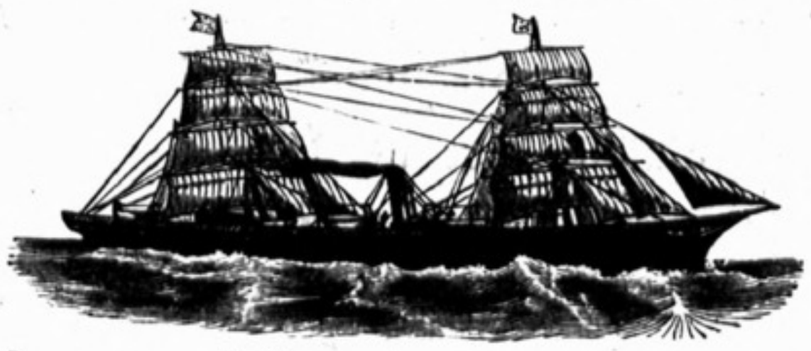

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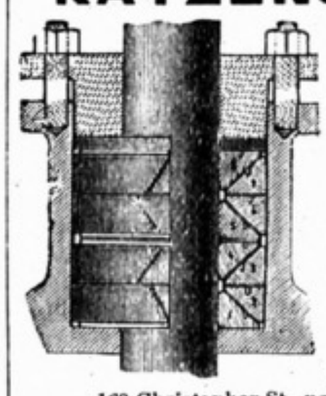

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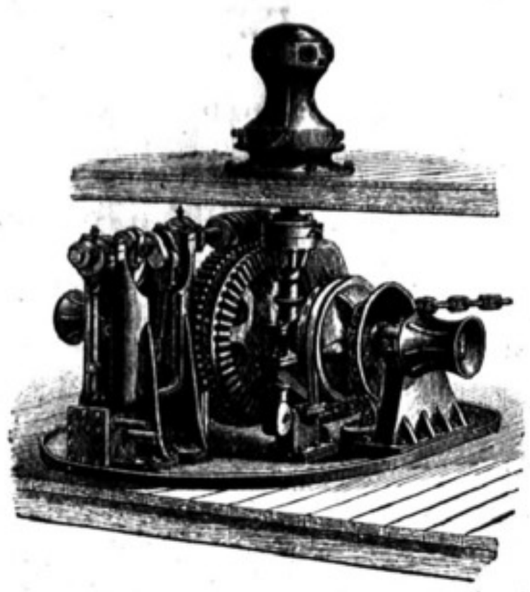
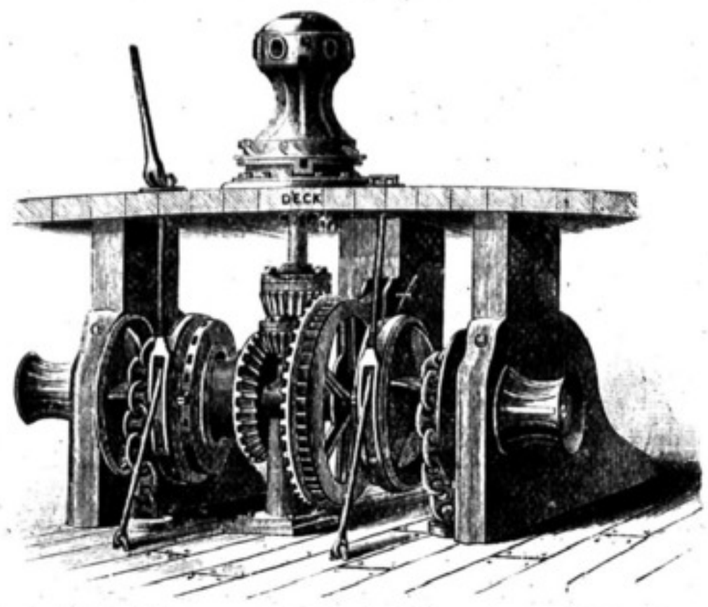
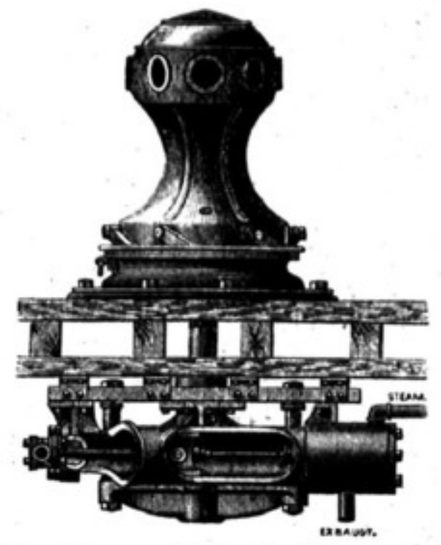


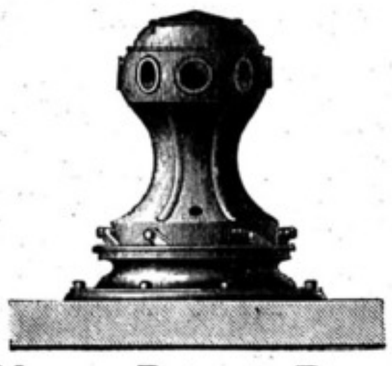
The Providence Patent Steam Capstan Windlass, New Style.



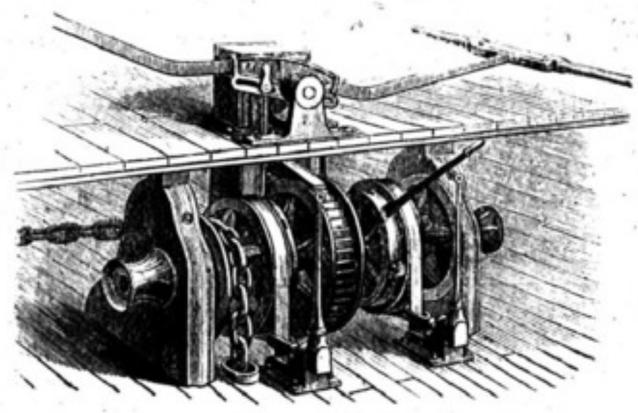
The Providence Patent Capstan Windlass.



The Providence Patent Steam Capstan.



The Providence Patent Power Capstan.



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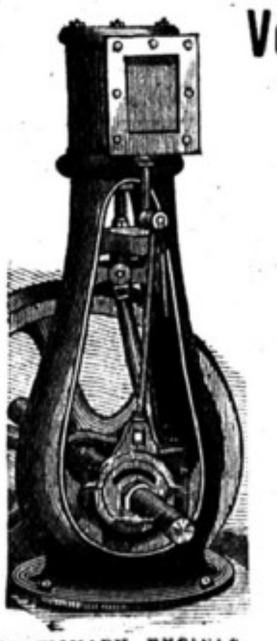

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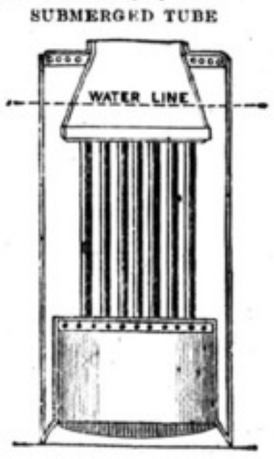
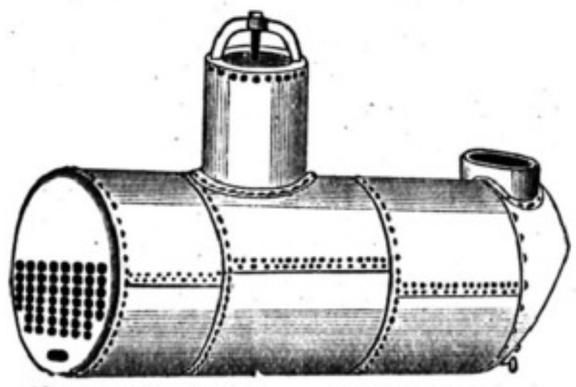
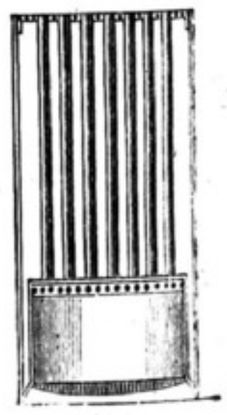


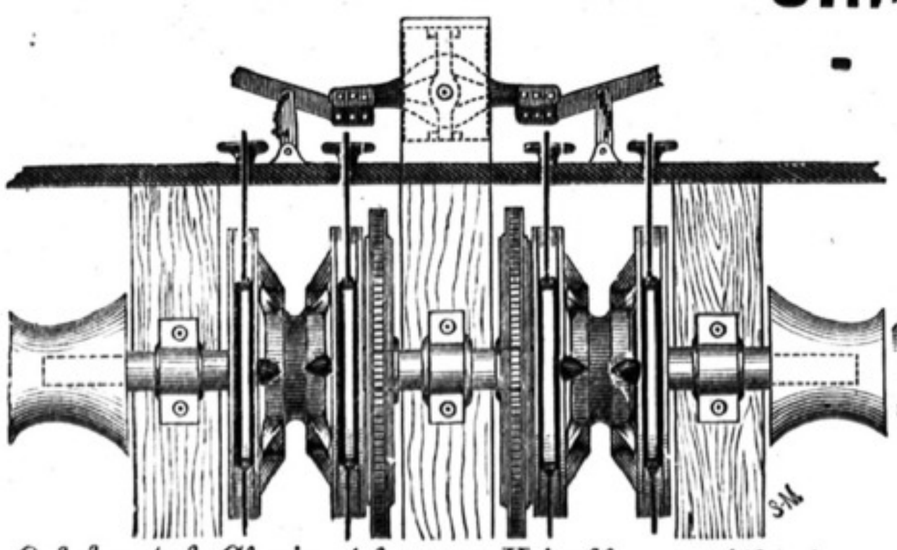



TUBULAR BOILER.

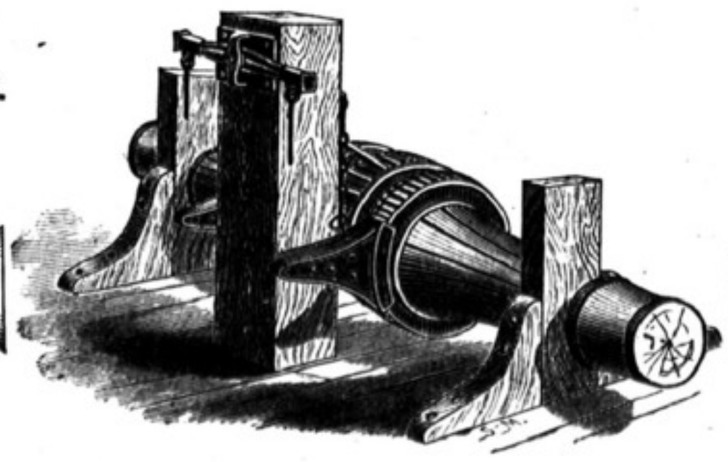
FULL TUBE BOILER.



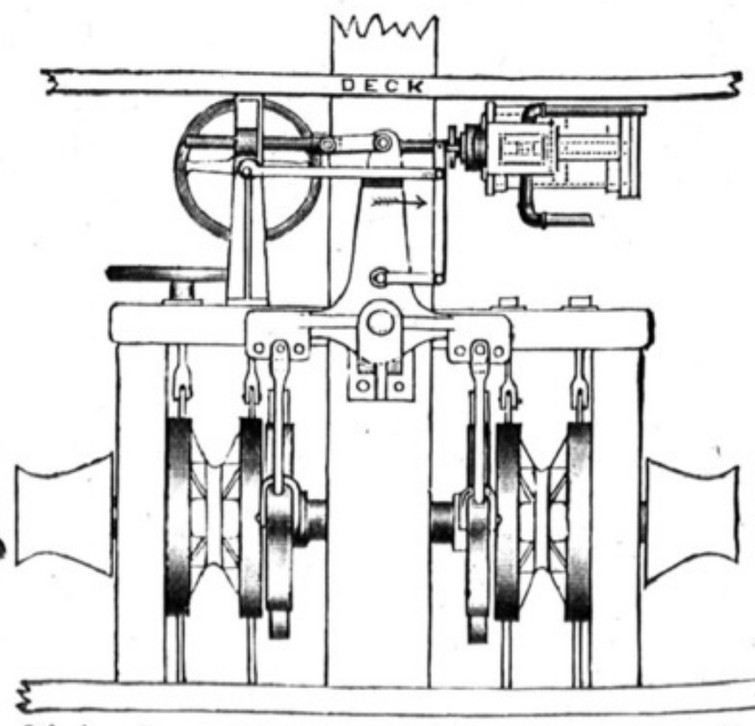
## Ship Chandler's List.



*Celebrated Chain Sheave Windlass, with Amazeen Beam.*



The Common Patent Windlass.




*Globe Iron Works Patent Steam Windlass*